- Top down
- Theories making predictions and then testing them
- Relies on general statements being correct
- **Inductive Reasoning** – specific evidence to general conclusions
- Casual inferences
- Confirmation bias
- Bottom up
- Collecting data and seeing what patterns/theories can be extracted
- Can’t always assume that specific evidence generally applies
- **Heuristics** – mental shortcuts used to make decisions and judgments
- Mentally useful when there is no clearly correct solution
- Choosing a major is different than the pendulum problem
- Reduce available options to a manageable number
- Reduce cognitive effort to arrive at a solution
- **Representative Heuristic** – strategy used to estimate the probability of one event based on how typical it is of another
- ExL applying knowledge of ‘typical professor behaviour’ to a newly encountered professor